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BEFORE THE

Federal Communications Commission

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FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

In the Matter of	)	
	)	
Preparation for International	)	ET Docket No. 93-198
Telecommunication Union World	)	
Radiocommunication Conferences	)	

COMMENTS OF AMSC SUBSIDIARY CORPORATION AND AMERICAN MOBILE RADIO CORPORATION

AMSC Subsidiary Corporation ("AMSC") and American Mobile Radio Corporation ("AMRC")[1/] hereby submit their comments on the Notice of Inquiry concerning the 1993 World Radiocommunication Conference ("WRC-93"). The purpose of WRC-93 is to set the agenda for the 1995 World Radiocommunication Conference ("WRC-95") and draft an agenda for the 1997 World Radiocommunication Conference ("WRC-97"). AMSC and AMRC urge the U.S. to support a narrow agenda for WRC-95, limited to use of certain frequency bands in the 1-3 GHz range for MSS and, if time permits, consideration of the recommendations of the Voluntary Group of Experts ("VGE").[2/] Any attempt to include other items on the agenda of WRC-95 will prevent

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1/ AMSC is licensed to construct, launch and operate the U.S. Mobile Satellite Service ("MSS") and AMS(R)S (aeronautical safety services) system. AMRC is an applicant to construct a Digital Audio Radio Satellite ("DARS") in the 2310-2360 MHz band. File Nos. 26/27-DSS-LA-93. Both companies are subsidiaries of American Mobile Satellite Corporation.

2/ AMSC and AMRC welcome the efforts of the VGE to simplify the Radio Regulations. At this point, however, until the VGE work is completed, it would be premature to comment on its efforts.

full consideration of these high priority issues. The agenda for WRC-97 should include any remaining MSS and VGE issues and preliminary planning for the Broadcasting

for the service, particularly in North America. Various studies demonstrated that from 265-355 megahertz of new, additional MSS allocations would be required to satisfy this demand.[3/] The final U.S. proposals for the conference totalled 253 megahertz for new, primary MSS allocations.[4/]

Led by the efforts of the United States, MSS advocates succeeded at WARC-92 in gaining new, primary MSS allocations in the 1-3 GHz range totalling 226 megahertz, less than two-thirds of the spectrum sought by U.S. industry. Moreover, time constraints at

ANALYSIS OF SCHEDULING OF MSS ISSUES FOR UPCOMING WRCs

MSS Band (MHz)	RES Nos.	REC Nos.	Responsible RS Groups	Completion of RS Studies	Comments	Earliest WRC for Inclusion on Agenda
1492-1525 Region 2 ↓	46, 113, 213	702, 717	TG 12/4, WPs 8B, 8D, 9B, 9C, 9D	1994/5	U.S. is developing a PFD coordination trigger and sharing criteria for protection of aero. telemetry, 1st submissions to WP 8A in late 1993 -- lots of interaction with WP 8D needed.	1995
1525-1530 3 Regions ↓	46, 113, 209 331	702, 715, 717	TG 12/4, WPs 8D 9B, 9C, 9D	1994	RS REC on MSS provision of priority and preemptive access for aeronautical and maritime distress and safety services can be completed in 1994 in order to support consideration of generic MSS (see REC 715). MSS/GMDSS implementation work in the RS also can be completed.	1995
1530-1544 3 Regions ↓	46, 208, 209 331	702, 715	WP 8D			
1544-1545 3 Regions ↓	46, 209, 331	702, 715	WP 8D			
1545-1559 3 Regions ↓	46, 113, 208	702, 715, 717	TG 12/4; WPs 8D, 9B, 9C, 9D			
1610-1626.5 3 Regions ↑	46, 113	66, 702, 717	TG 12/4; WPs 1A, 7D, 8B, 8D, 9B, 9C, 9D	1994/5	Development of RS REC in WP 8D on criteria for sharing with Aero. Radionav. (GLONASS) may start late 1993, and WPs 7D and 8D work on radio astronomy has not started.	1995
1613.8-1626.5 3 Regions ↓	46, 113	66, 715, 717				
1626.5-1645.5 3 Regions ↑	46, 113, 208, 209, 331	66, 702, 715 717	TG 12/4; WPs 1A, 8D, 9B, 9C, 9D	1994	See above for 1525-1559 MHz	1995
1645.5-1660.0 3 Regions ↑	46, 113, 208	66, 702, 715 717				
1660.0-1660.5 3 Regions ↑	46, 208	66, 701, 715	WPs 8D, 7D	1994	RS REC on sharing with radio astronomy are being developed.	1995
1675-1710 Region 2 ↑	46, 113, 213	66, 621, 702 717	TG 12/4; WPs 1A, 7C, 7D, 9B, 9C, 9D	1996	WP 7C question calls for completion of work by 1996, and work will take that long (complicated, new sharing situation).	1997

MSS Band (MHz)	RES Nos.	REC Nos.	Responsible RS Groups	Completion of RS Studies	Comments	Earliest WRC for Inclusion on Agenda
1930-1970 Region 2 ↑	113, 212	15, 717	TGs, 8/1, 12/4; WPs 8D, 9B, 9C, 9D	1994	TG 12/4 sharing criteria may enable elevation of Region 2 secondary MSS at 1930-1970/2120-2160 MHz to primary (perhaps subject to Article 14 and/or RES 46). WP 8D and TG 8/1, RECs on MSS sharing with FPLMTS will be completed in 1994.	1995
1970-1980 Region 2 ↑	46, 113, 212	717				
1980-2010 3 Regions ↑	46, 113, 212	717				
2120-2160 Region 2 ↓	113, 212	15, 717				
2160-2170 Region 2 ↓	46, 113, 212	717				
2170-2200 3 Regions ↓	46, 113, 212	717				
2483.5-2500 3 Regions ↓	46, 63, 113	66, 717	TG 12/4; WPs 1A, 8A, 8B, 8C, 8D, 9B, 9C, 9D	1994/5	ISM standards and MSS sharing with fixed, mobile and radiolocation are the major issues, but work on sharing with fixed services only has begun.	1995
2500-2520 3 Regions ↓	46, 63, 113	66, 717	TG 12/4; WPs 1A, 4A, 8A, 8B, 8D, 9B, 9C, 9D	1994/5	TG 12/4 is addressing main issue and will be done in 1994.	1995
2670-2690 3 Regions ↑	46, 113	717	TG 12/4; WPs 4A, 8A, 8B, 8D, 9B, 9C, 9D			

With respect to BSS, WARC-92 adopted a worldwide allocation for BSS in the 1452-1492 MHz band and numerous countries established a BSS allocation in the 2520-2655 MHz band. The U.S. and India allocated BSS spectrum in the 2310-2360 MHz band. Until study of the issue of sharing between BSS and terrestrial services and planning are completed, however, the allocations require administrations to operate BSS systems only in the upper 25 megahertz of that country's BSS allocation. RES 528.

Discussion

As can be seen from the chart above, certain existing MSS allocations will be ripe for discussion at WRC-95, while others may not be considered until WRC-97.[5/] This should not, however, slow the U.S. effort to gain as much new spectrum as possible for MSS to meet growing demand for the service and ease congestion in bands where MSS currently is allocated. Indeed, starting at WRC-95, the U.S. should propose elevating the MSS allocation at 1930-1970/2120-2160 MHz to primary status and new MSS allocations in bands between 1-3 GHz, including all bands where there are existing Mobile service allocations. Such allocations would help narrow the gap between MSS spectrum requirements and existing allocations, give the U.S. increased flexibility with respect to the future implementation of new services, and will allow the marketplace to better dictate future allocations.

5/ AMSC has been working diligently with the RS Groups to ensure that sharing criteria are developed that will allow the maximum possible use of new MSS allocations. To date, it appears that much of the work on sharing issues with geostationary satellite systems is likely to be completed before such studies are completed for non-geostationary satellites because of the complexity of the interactions between non-geostationary systems and other services.

The U.S. also should continue to advocate worldwide generic MSS allocations in the 1525-1559/1626.5-1660.5 MHz bands. Generic allocations improve spectrum utilization and efficiency, particularly in terms of sharing arrangements developed during international coordination. In the past, aeronautical and maritime interests have opposed generic allocations in these bands because of the presence of distress and safety services, despite footnotes requiring systems operating in the bands to provide priority and preemptive access to those safety services. Before WRC-95, the AMSC system will be operational and will provide conclusive evidence that priority and preemptive access for safety services is a valid concept, thereby strengthening the U.S. position on generic allocations at WRC-95.

Below are specific recommendations concerning some of the bands that the U.S. should address as it prepares for the upcoming radiocommunication conferences.

1492-1525 MHz. The U.S. has limited this allocation to the fixed and mobile services. RR 722C. This allocation should be modified so that a portion of the band (1515-1525 MHz), is made available in the U.S. for MSS, if it can be demonstrated that a domestic MSS system can share with aeronautical telemetry operations. Domestic MSS systems should not be precluded from this band given that foreign MSS systems will be less compatible with aeronautical telemetry.

1675-1710 MHz. AMSC believes that MSS can share these frequencies with current and future meteorological aids and satellites. To date, there is general agreement in the RS that parts of the band could be made available for MSS.[6/]

6/ See Doc. 7C/TEMP/27 (Rev. 1) (April 5, 1993). In addition, AMSC supports the inclusion of an agenda item on wind profilers at WRC-97. REC 621. By that time, RS studies will have been completed and the U.S. will have had time to formulate a position. In the long term, wind profilers (and other new systems) could obviate the need for meteorological aids systems in the 1675-1710 MHz band, freeing

1930-1970/2120-2160 MHz. Elevate MSS allocation to primary.

1970-2010/2160-2200 MHz. AMSC expects that these bands will accommodate MSS systems that will be part of the family of personal communications services the Commission has earmarked for these bands.[7/]

Digital Audio Radio Service. At the 1992 WARC, the U.S. and India allocated the 2310-2360 MHz band on a primary basis to BSS and complementary terrestrial sound broadcasting service.[8/] Because of the disparate allocations and sharing issues concerning BSS, however, it was agreed at WARC-92 (RES 528) that a conference should be convened before 1998 to plan BSS in the 1-3 GHz range, develop procedures for coordination of terrestrial broadcasting, and review criteria for BSS sharing with other services. Until these issues were resolved, it also was agreed that BSS systems may be introduced only in the upper 25 megahertz of the appropriate frequency band in order to preserve future planning options.

The U.S. must look very closely at its options for BSS. There are four applications, including that of AMRC, pending to construct U.S. domestic BSS systems in the 2310-2360 MHz band. It appears unlikely that all four of these systems could operate in the upper 25 megahertz. In any event, because the only issue is coordination between U.S. BSS systems and terrestrial systems in this region, and given that the necessary technical studies are underway in the RS, the 2310-2360 MHz band should not be considered at WRC-95 and there should not be any restriction on use of the lower 25

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portions of the band for MSS.

7/ See e.g., Application of AMSC, 15/16-DSS-MP-91 (June 3, 1991); Celsat Petition for Rulemaking, RM-7927 (July 7, 1993).

8/ This allocation also has been proposed domestically by the FCC. Notice of Proposed

MHz. The 2310-2360 MHz band does not need planning and sharing can best be handled through bilateral negotiations.[9/]

Conclusion

As discussed above, the U.S. should advocate narrow agendas for the upcoming World Radiocommunication Conferences that will facilitate the availability of MSS and BSS by geostationary satellites.

Respectfully submitted,

AMSC SUBSIDIARY CORPORATION
AMERICAN MOBILE RADIO CORPORATION

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